



EOSDIS

NASA'S EARTH OBSERVING SYSTEM
DATA AND INFORMATION SYSTEM

Building an NRT Portal

**Let's do this
(if it makes sense)**

NASA NRT Workshop

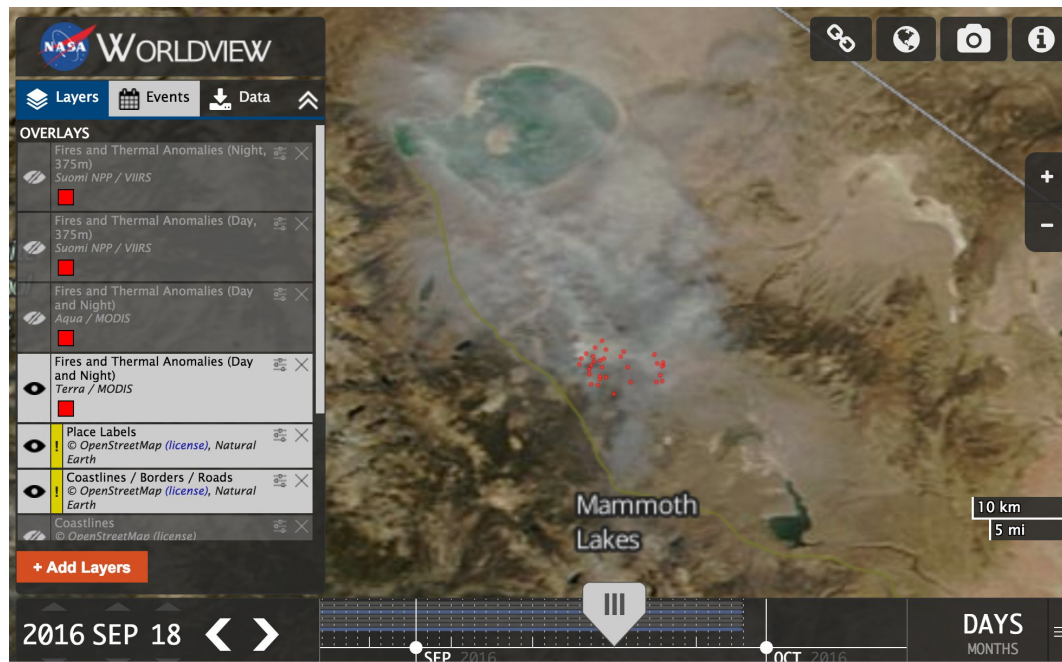
Sep 27-29, 2016

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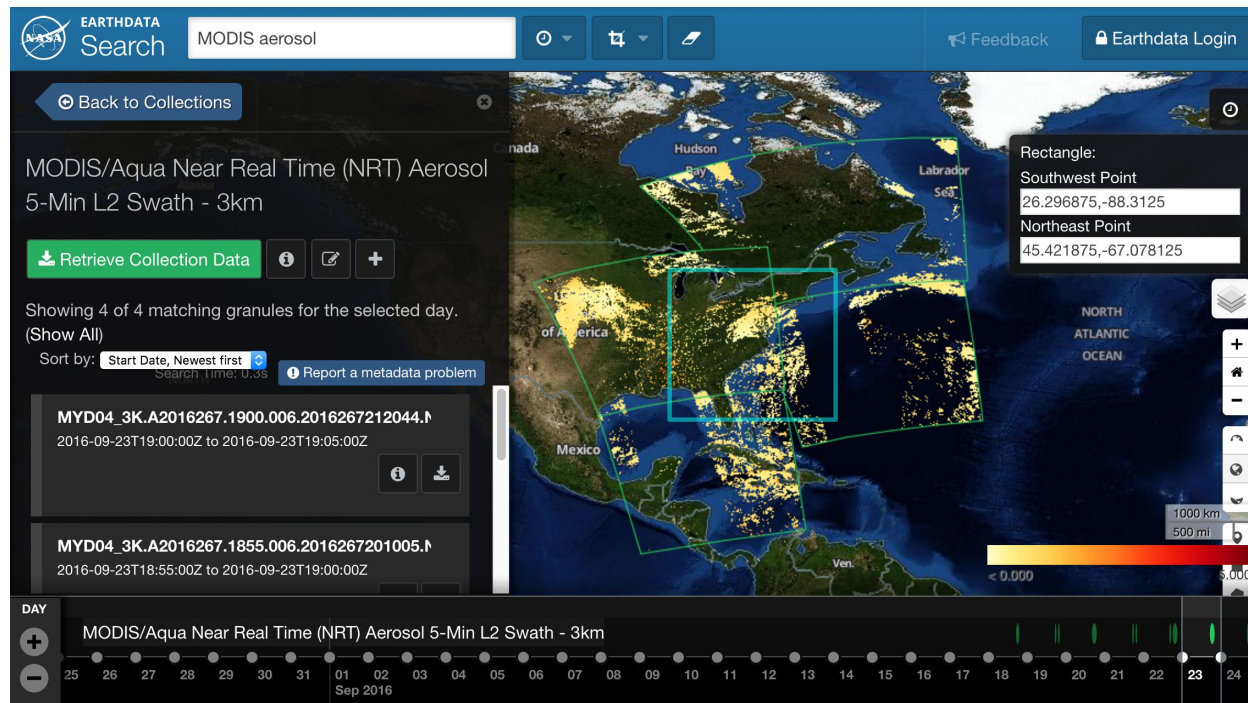
Brief Recap from Yesterday

- Visualization
 - The Global Imagery Browse Services (GIBS) provides full-resolution imagery via web services for 200+ EOSDIS collections (a fraction of the total)
 - The Worldview client provides an interface for all GIBS products and will continue to categorize its layers into NRT application areas



Brief Recap from Yesterday

- Search and Order
 - The Common Metadata Repository (CMR) is a database for **ALL** collections (over 30k) available through EOSDIS
 - The Earthdata Search client provides a window into all collections in CMR



Let's Customize Earthdata Search

- It has all EOSDIS collections + some from the outside
- It's probably easier to add new products, as needed

Disclaimers

- The proposed approaches are relatively simple and are based upon what can be achieved “now”
- There have been many great ideas for portal capabilities discussed at this workshop; we want to hear them! (and HQ will need to fund them)

Existing Approach

NASA EARTHDATA Search Type any topic or collection

[Feedback](#) [Earthdata Login](#)

Browse Collections **169 Matching Collections**

Features Add collections to your project to [Learn More](#) [metadata problem](#)

Near Real Time

Subsetting Services

Keywords

Atmosphere 7

Biosphere 16

Cryosphere 17

Land Surface 59

Oceans 10

Solid Earth 1

Spectral/Engineering 52

Terrestrial Hydrosphere 7

MODIS/Aqua Near Real Time (NRT) Aerosol 5-Min L2 Swath 10km

No image available

MYD04_L2 v6NRT - NASA/GSFC/EOS/ESDIS/LANCEMODIS

2015-12-06 ongoing | 1549 Granules

MODIS/Aqua Near Real Time (NRT) Land Surface Temperature/Emissivity 5-Min L2 Swath 1km (C005)

No image available

MYD11_L2 v5NRT - NASA/GSFC/EOS/ESDIS/LANCEMODIS

2002-05-04 ongoing | 2823 Granules

MODIS/Aqua Near Real Time (NRT) Snow Cover 5-Min L2

No image available


Map

1000 km 500 mi




Proposed Enhancement #1

- Extend existing Earthdata Search client:
<https://search.earthdata.nasa.gov/>
- Apply NRT application-specific tags to collections
 - E.g., Add “Air Quality” or “Severe Storms” tags to create a new set of facets

Proposed Enhancement #1

 **EARTHDATA**
Search

Type any topic or collection

Feedback

Earthdata Login

Browse Collections

Features

Map Imagery

Near Real Time

Subsetting Services

Keywords

Platforms

169 Matching Collections


Add collections to your project to compare and retrieve their data.

Search Time: 2.5s

Learn More

Report a metadata problem

Recent and Featured

 **NRT**

No image available


MODIS/Aqua Near Real Time (NRT) Aerosol 5-Min L2 Swath 10km

MYD04_L2 v6NRT -

NASA/GSFC/EOS/ESDIS/LANCEMODIS

Info

+

 **NRT**

No image available

(NRT) Land Surface Temperature/Emissivity 5-Min L2 Swath 1km (C005)


MYD11_L2 v5NRT -

NASA/GSFC/EOS/ESDIS/LANCEMODIS

2002-05-04 ongoing | 2823 Granules

Info

+

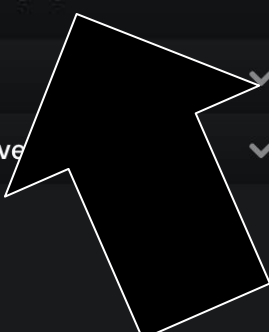
 **NRT**


MODIS/Aqua Near Real Time (NRT) Snow Cover 5-Min L2

NRT Applications

Projects

Processing level





1000 km
500 mi

Proposed Enhancement #1

NRT Applications

Air Quality

Ash Plumes

Drought

Dust Storms

Fires

Floods

Severe Storms

Shipping

Vegetation

Collections

your project to
ve their data.

1.1s

Report a metadata problem

atured

IODIS/Aqua Near Real Time
(NRT) Aerosol 5-Min L2 Swath
0km

MYD04_L2 v6NRT -
ASA/GSFC/EOS/ESDIS/LANCEMODIS

2015-12-06

ngoing | 1546 Granules

+

IODIS/Aqua Near Real Time
(NRT) Land Surface
Temperature/Emissivity 5-Min
2 Swath 1km (C005)

YD11_L2 v5NRT -
SA/GSFC/EOS/ESDIS/LANCEMODIS

2002-05-04

ngoing | 2819 Granules

+

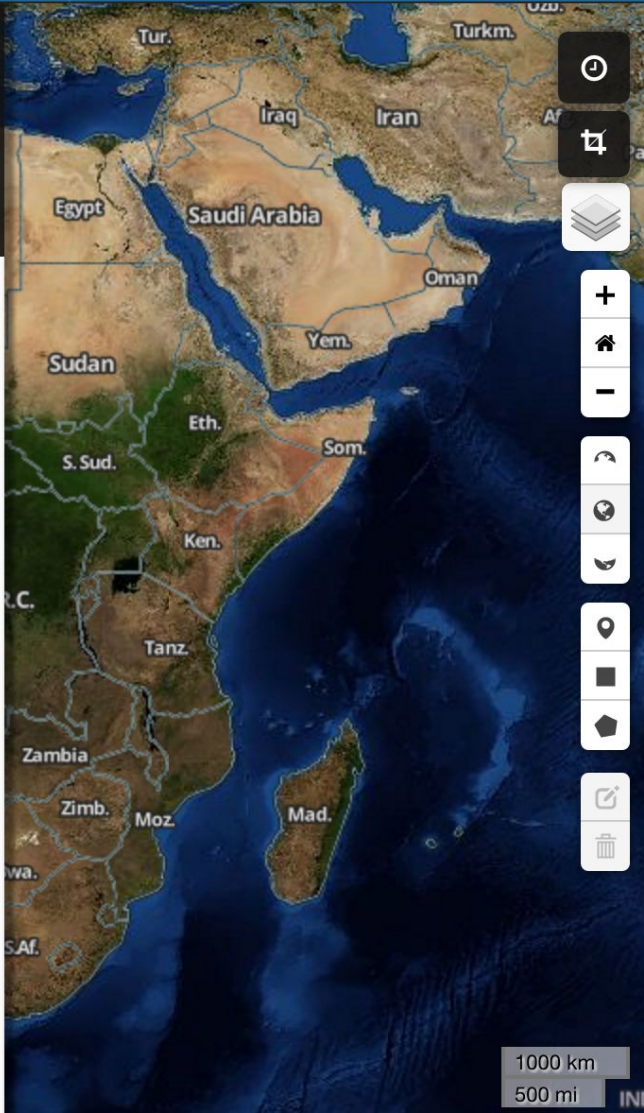
IODIS/Aqua Near Real Time
(NRT) Snow Cover 5-Min L2

Feedback

Earthdata Login

1000 km

500 mi

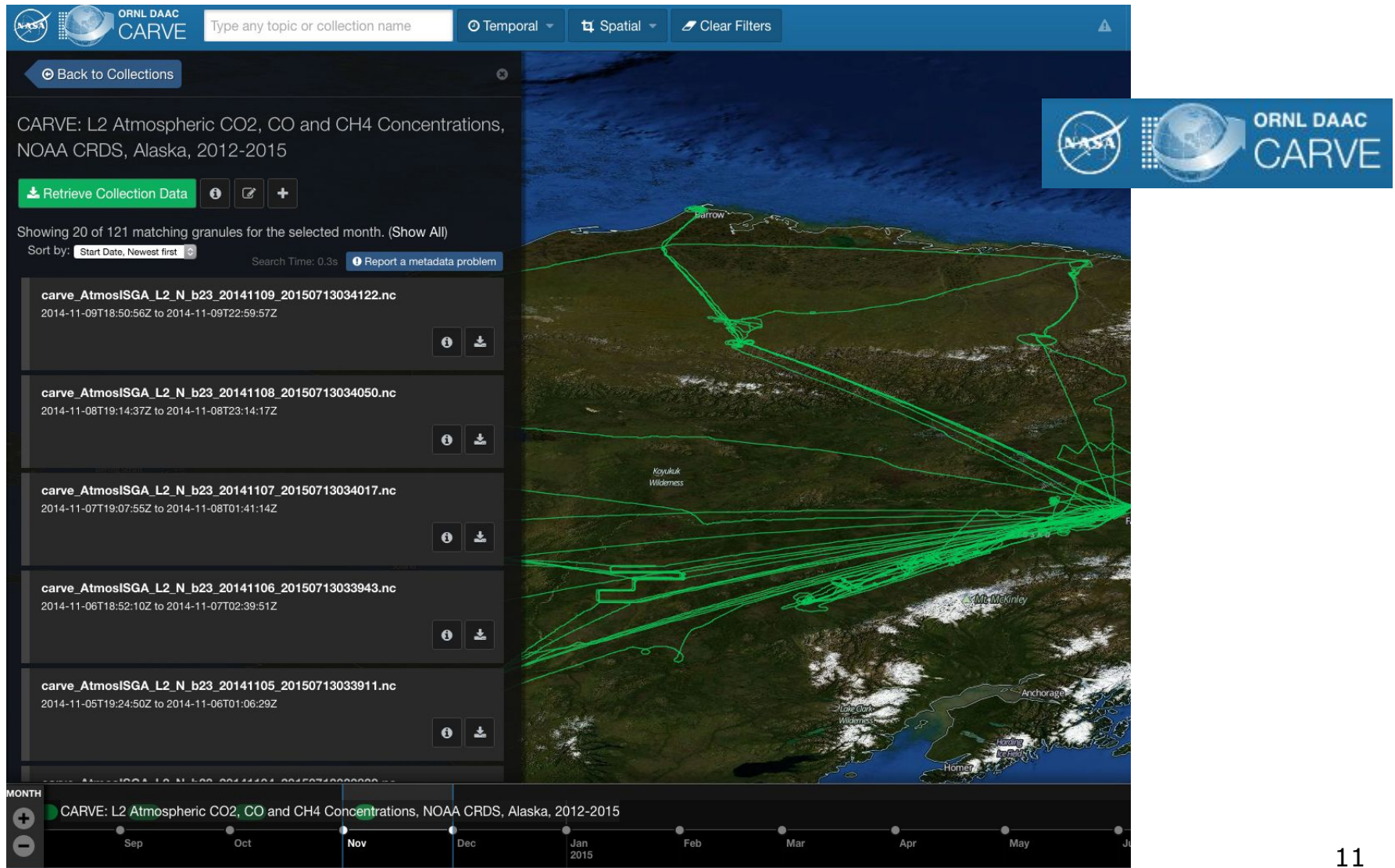


Proposed Enhancement #2

- Take what we've done with Enhancement #1
- Then create a customized Earthdata Search client which only has NRT collections in it:
<https://search.earthdata.nasa.gov/portal/nrt/>

Existing Example: CARVE Portal

<https://search.earthdata.nasa.gov/portal/carve/search>



Steps to Make This a Reality

1. Ensure all metadata needed is available in the Common Metadata Repository (CMR)
2. Complete the categorization of collections into NRT application areas in this workshop
3. Tag NRT collections with appropriate application area(s) in CMR

Steps to Make This a Reality

4. Work with Earthdata Search team to include the NRT application area facets and customize the portal accordingly

Takeaways / Questions

- Would either of these approaches be helpful?
- If so, are there strong preferences?
 - #1: Just add Application Area facets
 - #2: Custom portal + facets from #1